

BEST AVAILABLE COPY

(12) UK Patent Application (19) GB (11) 2 242 737 (13) A

(43) Date of A publication 09.10.1991

(21) Application No 9102759.9

(22) Date of filing 08.02.1991

(30) Priority data

(31) 9007608

(32) 04.04.1990

(33) GB

(51) INT CL⁸

F24C 15/06, H04N 5/64

(52) UK CL (Edition K)

F4W W57

H4F FD45

(56) Documents cited

GB 1266131 A

(71) Applicant

John Sydney Shute
2 Woodside Drive, Wrenthorpe, Wakefield, WF2 0NA,
United Kingdom

(72) Inventor

John Sydney Shute

(74) Agent and/or Address for Service

Balley, Walsh & Co
5 York Place, Leeds, LS1 2SD, United Kingdom

(58) Field of search

UK CL (Edition K) F4W, H4F FJH

INT CL⁸ F24C, H04N

Online databases: WPI

(54) Artificial fire units

(57) An artificial fire unit comprises a television set 2 and preferably also a video recorder for playing recordings of live fires on the television set and further it also comprises a number of suitable embellishments in the form of an artificial hood and fender positioned around the television set such that the television set occupies a cavity provided by the fire unit whereby a display of a video recording of a fire on the television set creates the illusion that a real fire is burning.

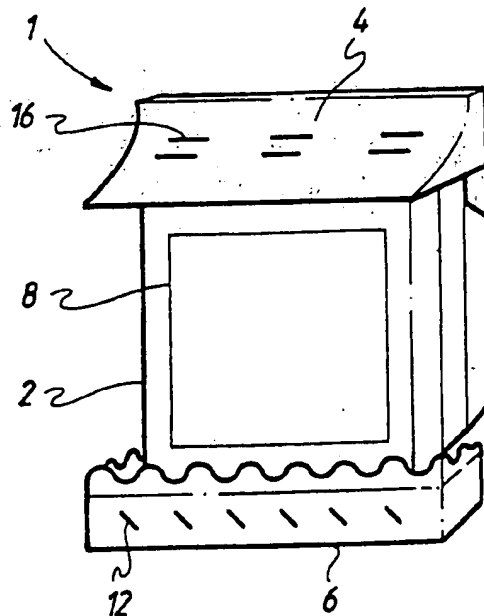


FIG. 1

1-1

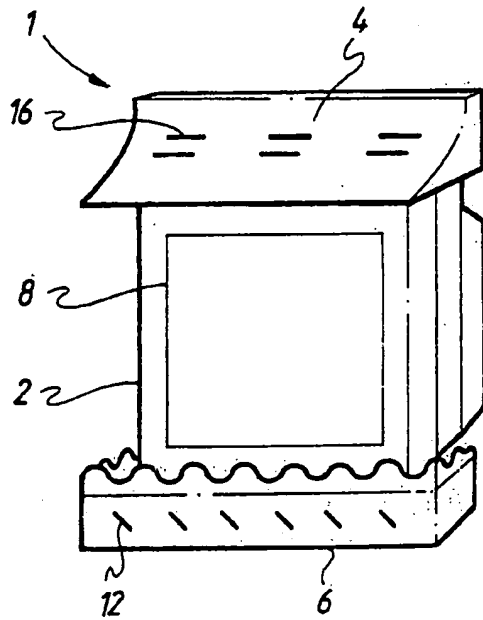


FIG. 1

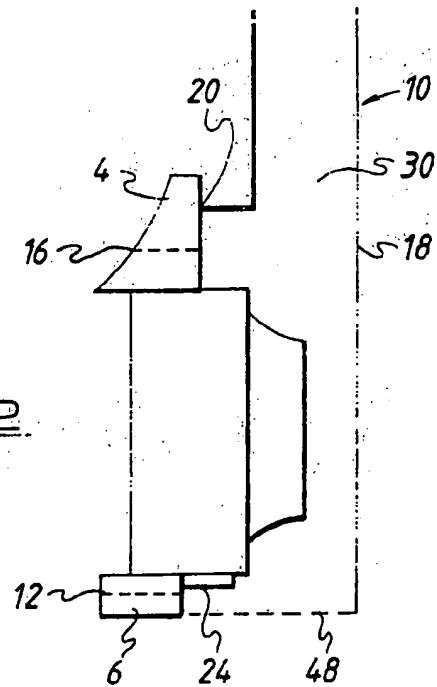


FIG. 2

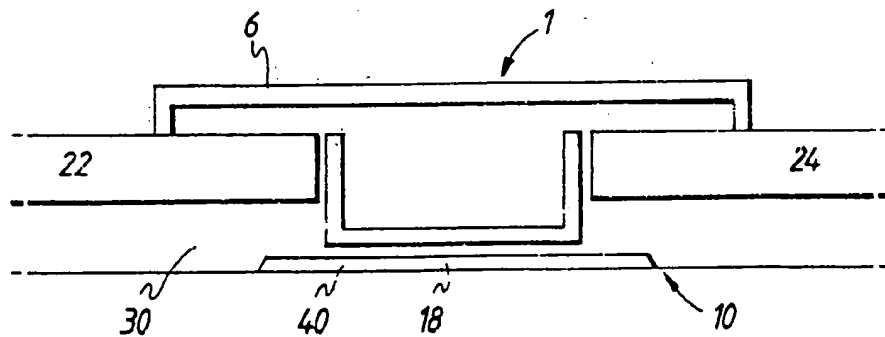


FIG. 3

Improvements relating to Fire Units

The invention relates to a domestic fire unit and in particular to an artificial fire unit which is adapted in order to create an illusion that the unit represents a real and workable fire unit.

Domestic fire units may be located in a number of rooms within a dwelling but are typically found in a community room such as a sitting room or lounge. These fire units may either burn solid fuel such as coal or other forms of fuel such as gas or oil and typically their appearance is determined by the source of fuel combusted. Live fire units which burn solid fuel have enjoyed considerable popularity over recent years and are commonly held to be an attractive feature in a sitting room or lounge. Indeed, fire units often represent the focal point of such a room and may even have a cohesive effect as individuals tend, by habit, to draw near to a fire when relaxing. As a result of the aforementioned points, fire units have been designed having regard to their aesthetic appeal and so they are frequently embellished with brass or copper hoods, artificial fenders, carved wooden frames or surrounds and various other forms of decoration according to style and choice.

However, with the advent of central heating systems the functional significance of domestic fire units has declined since the greatest proportion of domestic heating is obtained via the heat exchange provided by a central heating system. Despite this fact domestic fire units have retained their popularity and despite their ineffectiveness are still used in domestic dwellings to enhance the atmosphere in a sitting room or lounge.

A further example of an item which can represent a focal

point in a communal area such as a sitting room or a lounge is a television set. In common with a fire unit a television also has the effect of drawing individuals together as they congregate to watch a particular television programme.

Both fires and televisions represent significantly costly items in any family budget and moreover they may occupy significant amounts of space in any family sitting room.

Bearing the aforementioned facts in mind, and particularly the fact that domestic fire units are by and large functionally redundant, the invention provides for a means of combining a fire unit and a television set in one item.

Accordingly, the invention provides for an artificial fire unit embodying a television set that is viewable when appropriately positioned in a room.

Preferably the artificial fire unit has substantially the outer appearance of a conventional domestic fire unit and also having incorporated therein a television set and video recorder, the TV and video being located in a cavity provided by the fire unit hearth such that a display of a video recording of a fire on the TV set creates an illusion that a real fire is burning. In a further preferred embodiment the video recorder may be built into the TV set.

Preferably the television set is provided with a flat screen that appears dark when the television is switched off such that an illusion of an empty hearth is created.

Preferably further still the fire unit is provided with suitable embellishments which enhance the quality of the illusion. Such embellishments may comprise a brass or copper artificial hood and/or may further comprise an artificial

fender and may comprise even further still a carved wooden frame.

It is envisaged that a fire unit in accordance with the invention would typically be located within the lower most part of a domestic flu and it is anticipated that this arrangement will provide a particularly effective means of presenting the illusion. In this arrangement it will be necessary to provide air vents within the unit such that air may circulate around the unit and in doing so vent the television tube.

The provision of a unit in accordance with the invention will not only save a family money in that the purchase of a single unit will fulfill the requirements of two items, which had hitherto to be purchased separately, but it will also save on space. Moreover, fuel consumption will also be reduced as the appealing atmosphere attributable to the working of a domestic fire unit can now be achieved by the provision of a recording of a fire. This has obvious environmental benefits in that fuel combustion is reduced and side products associated therewith are likewise reduced. This will no doubt have a significant effect on abating the green house effect and therefore it can also be said that the unit is environmentally friendly.

It is anticipated that a number of recordings embodying a burning fire will be available such that an individual may choose the nature of the fire which he wishes to have displayed; for instance a recording of the combustion of wooden logs with the accompanying characteristic sparking of the wood and crackling of the logs will be available as well as the combustion of other forms of solid or liquid fuels.

It will be understood that when the television is not being

used for displaying a recording of a burning fire it may be used in a conventional manner and thus a fire unit in accordance with the invention is multi purpose.

It is also envisaged that a fire unit in accordance with the invention may be located in a room without a flu facility and in this instance when the fire unit is placed against a wall it is expected that it will create an illusion that the room is provided with a flu and a working fire unit. Thus the unit can be used to create the illusion of a real working fire even in an environment where no such fire unit is possible.

An embodiment of the invention will now be described by reference to the accompanying drawings in which;-

Fig. 1 represents a perspective view of a fire unit in accordance with the invention.

Fig. 2 represents a side elevation view of a fire unit in accordance with the invention which has been positioned in a flu.

Fig. 3 represents a plan view of the fire units shown in Fig. 2.

Referring to the figures and firstly to Fig. 1, a fire unit is provided with conventional fire unit embellishments referenced generally by numeral 1 and arranged in contact therewith is a television set 2. Embellishments 1 more specifically comprise a fire hood 4 and a fender 6. It will be understood that the hood 4 and the fender 6 may be fashioned according to preference. Television set 2 is provided with a screen 8 that is substantially flat in order to enhance the quality of the illusion created by the

artificial fire unit. In a preferred form of the embodiment the television screen will be 16 ins², though other sized screens may be used, such that the size of the unit will be accommodated by the cavity provided by a conventional domestic flu. It can therefore be seen by reference to Figure 1 that when a fire unit is constructed in accordance with the invention its appearance mimics that of a conventional domestic lounge burner.

Referring now to Figure 2 the unit shown in Figure 1 is illustrated in side elevation view when located within the cavity 30 of a flu 10. As can be seen from Figure 2, the dimensions of flu 10 will determine the size of the fire unit. Flu 10 is L-shaped at its lower most end such that cavity 30 projects outwardly into a room. Typically a width of 200 mm is available for locating a fire unit, that is from the front wall 20 of cavity 30 of the flu to the opposite rear wall 18. A height of 650 mm is typically available from the floor or hearth level 48 of the flu to the lower edge of the front wall 20 of the flu. When dimensional constraints of the aforetype are imposed it is adviseable for the height of the television set not to exceed a height of 530 mm from the floor or hearth level 48. Adherence to the aforementioned constraints ensures that the television set fits comfortably in the flu cavity 30 and is provided with a surrounding air pocket such that the television tube can be adequately vented. To aid this requirement fender 6 is provided with vents 12 and hood 4 is provided with vents 16. It can be seen by reference to Fig. 2 that air may circulate around the television set by means of vents 12 in fender 6, the cavity supplied at the rear most surface of the television and the vents 16 located in the hood 4.

Referring now to Figure 3 a plan view of a fire unit located in a flu is illustrated and it can be seen that the fire unit

1 sits comfortably within the cavity 30 of flu 10. Between the rear of the fire unit 1 and the rear wall 18 of flu 10 is a pocket of air which serves to aid ventilation as described above. Also provided on the rear wall 18 of flu 10 immediately behind the fire unit is a damp proof membrane 40. Fender 6 of fire unit 1 projects outwardly beyond front wall 20 (not shown) of flu 10 and laterally to overlap the lower sides 22 and 24 of front wall 20. In this configuration it can be seen that the fire unit most accurately represents a workable domestic lounge burner.

A video unit 24 is located at the base of the television unit as shown in Figure 2 and is concealed by means of fender 6. When a recording of a live fire is displayed on the television screen 8, by means of the video recorder 24, the display creates the illusion that a live fire is burning in the hearth and thus adds considerable aesthetic appeal to a room.

It will be understood that when the television screen is not operational, due to the fact that the television screen is flat and also dark, the television will provide an image of a dark space similar to that visible in an empty hearth and therefore it will create the illusion that the hearth is empty and the fire is not burning.

It will be also understood that the video recorder may be used to display video films and therefore the unit can be used as a means of displaying a film or it may be used, without employing the video recorder, in a conventional manner to display television programmes. In this context the fire unit will provide a focal point as that of a conventional television unit.

It can be seen from the foregoing the advantages that the

fire unit has to offer in providing an imaginative means of combining the features of two conventionally distinct units.

Claims

1. An artificial fire unit embodying a television set wherein the television set is viewable when appropriately positioned in the room.
2. An artificial fire unit according to Claim 1 wherein the fire unit has substantially the outer appearance of the conventional domestic fire unit and also has incorporated therein a television set and video recorder, the TV and video being located in a cavity provided by the fire unit hearth such that a display of a video recording of a fire on the TV set creates an illusion that a real fire is burning.
3. An artificial fire unit according to Claim 2 wherein the video recorder is built into the television set.
4. An artificial fire unit according to any proceeding claim wherein the television set is provided with a flat screen that appears dark when the television set is switched off.
5. An artificial fire unit according to any proceeding claim wherein the fire unit is provided with appropriate embellishments.
6. An artificial fire unit according to Claim 5 wherein at least one embellishment comprise an artificial hood.
7. An artificial fire unit according to Claim 6 wherein the hood is made of brass or copper.
8. An artificial fire unit according to Claim 5 wherein at least one embellishment comprises a fender.
9. An artificial fire unit according to Claim 5 wherein at

least one embellishment comprises a carved wooden frame.

10. An artificial fire unit according to any proceeding claim wherein the fire unit is located within the lower most part of domestic flue.

11. An artificial fire unit according to any proceeding claim wherein the unit is provided with air vents such that air may circulate around the unit.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.